

PATENT APPLICATION

**RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
TECHNOLOGY CENTER ART UNIT 1791**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yasushi UCHIDA et al.

Group Art Unit: 1791

Application No.: 10/531,578

Examiner: R. KEMMERLE

Filed: April 18, 2005

Docket No.: 123521

For: METHOD FOR MANUFACTURING POROUS HONEYCOMB STRUCTURE, AND
HONEYCOMB FORMED BODY

REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In reply to the April 8, 2009 Office Action, reconsideration of the rejection is respectfully requested in light of the following remarks.

Claims 9, 11 and 13-18 are pending in this application. Claims 13-16 stand withdrawn.

I. Double Patenting Rejection

Claims 9, 11 and 12 are rejected for non-statutory obviousness-type double patenting over claims 7 and 9 of copending Application No. 10/531,873. This rejection is respectfully traversed.

Applicants request that this rejection be held in abeyance until this application is otherwise in condition for allowance.

II. §103(a) Rejection

Claims 9, 11, 17 and 18 are rejected under 35 U.S.C. §103(a) over WO 01/16049 to Beall in view of U.S. Patent No. 5,069,697 to Hamaguchi et al. ("Hamaguchi"). This rejection is respectfully traversed.

A. Previous Arguments

Applicants first respectfully reiterate their previous arguments traversing this rejection. As argued in the February 19, 2009 Amendment, claim 9 recites adding colloidal particles to the clay in proportion to the amount of aggregate particle material in the clay. Claim 9 also recites the clay contains 0.1 to 10 parts by mass of the colloidal particles for every 100 parts by mass of the aggregate particle material.

By contrast, Beall discloses a binder system in which there are 100 parts by weight of the "inorganic, alumina and silica forming sources and talc, raw material mixture." See page 9, lines 16-21 of Beall. This inorganic raw material mixture is allegedly equivalent to the recited aggregate particle material of claim 9. Beall further discloses colloidal silica as one of the above mentioned silica forming sources. Thus, the colloidal silica disclosed by Beall is used as part of the alleged aggregate particle material. By contrast, claim 9 recites the colloidal particles are added as a separate additive to the clay.

The designation of which material lie in and out of the aggregate particle material is extremely relevant because claim 9 recites that the colloidal particles are added by mass based on the separate mass of the aggregate particle materials. Applicants test results, shown in Table 1 (on page 21 of the specification) detail the criticality of the addition of the colloidal particles as a separate additive relative the aggregate particle material. Beall does not disclose the criticality of the two unique groups, nor the advantages provided by such a calculation to a method of production.

Thus, Beall does not disclose adding a first group of materials to a second group of materials, based on the mass of the second group, because Beall does not disclose two distinct groups.

B. Additional Arguments

Applicants now present additional arguments demonstrating that Beall does not disclose or suggest the features of claim 9. First, Beall itself recognizes the difference between a particle being part of the aggregate particle material, and being an additive to this aggregate particle material. Second, Beall does not disclose or suggest that "the total mass of the component is 50% or more of the total mass of the aggregate particle material" as recited in claim 9.

1. Beall Recognizes a Difference Between Additives and Core Materials

The Office Action asserts that the attempt by Applicant to label some of the materials of Beall within, and other material outside of, an arbitrary group does not overcome that Beall mixes the same materials. Yet Beall itself labels certain combinations of raw materials into similar "groups."

Specifically, page 9 of Beall discusses the addition of a binder system to the raw materials. Beall discloses that first the "raw materials of which the plasticized mixture is comprised are combined in a mixing step." See Beall, page 9, lines 9-11. Beall then discloses that the "binder system is added at this point" (emphasis added). See Beall, page 9, lines 11-12. Beall discloses that the binder system can be added one component at a time, or can be premixed before being added to the raw materials. See Beall, page 9, lines 26-31. But Beall specifically notes that the raw materials are first mixed separately. Thus, Beall acknowledges that the choice of when a material is added during the process is significant.

Beall specifically discloses that the alleged colloidal silica is one of the "silica forming sources" that are used to create the raw material. See Beall, page 8, lines 8-10. Thus, Beall

discloses that the colloidal silica is part of the raw materials that must be mixed completely prior to the introduction of another portion of the total clay mixture. Thus, one of ordinary skill in the art, when reading Beall, would not consider taking the colloidal silica from the raw materials mix and adding later as an additive after the binder system was added.

Yet the Office Action asserts that it is immaterial whether the colloidal silica is added as part of the raw materials or as a separately additive. This assertion contradicts the implications of page 9 of Beall. For this reason, the Office Action's assertions lack merit.

2. Beall does not disclose or suggest that "the total mass of the component is 50% or more of the total mass of the aggregate particle material"

Claim 9 recites "the total mass of the component is 50% or more of the total mass of the aggregate particle material." The Office Action asserts that Beall discloses this feature at page 9, lines 9-21. See Office Action, page 4, lines 2-4. The cited portion of Beall discloses that for 100 parts by weight of the raw material mixture, an additional amount of: 0.2-2 parts by weight of sodium stearate may be added; 2.5-6 parts by weight of methylcellulose may be added; and 20-50 parts by water may be added.

The Office Action asserts this section of Beall discloses the recite feature because "the amount of additives disclosed [is] less than 50% by mass." This assertion lacks merit.

Claim 9 recites mixing an aggregate particle material, composed of a ceramic and/or a metal, with water, an organic binder, and a pore former. In other words, the aggregate particle material is the ceramic and/or metal combination. Claim 9 further recites that this aggregate particle material includes "a component" (from among the list potential components) and that this component is 50% or more of the total mass of the aggregate particle material. This concept is best illustrated in Example 1 of Applicants' specification.

See page 16, lines 21-25. In this example, the aggregate particle material comprised 80 parts silicon carbide to 20 parts metal silicon powder.

The cited section of Beall fails to disclose the inner mass relationships of the inorganic raw mixture, which together constitute the original 100 parts by mass. Rather, the cited section of Beall only discusses the relative masses of materials added to the alleged aggregate particle material.

The only discussion in Beall as to the relative weights of the material comprising the raw material mixture is on page 4, lines 4-7. But this portion of Beall fails to disclose or suggest that the recited component must be 50% or more of the total mass of the raw material mixture. Beall also fails to disclose the criticality of such a mixture percentage or disclose that it would be desirable. Thus, Beall fails to disclose or suggest that the total mass of the component is 50% or more of the total mass of the aggregate particle material.

For at least the above reasons, withdrawal of the rejection of claim 9, and claims 11, 17 and 18 depending therefrom, is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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